



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,433	11/03/2003	Jung-Keun Ahn	P56975	1520
7590	04/04/2006		EXAMINER	
Robert E. Bushnell Suite 300 1522 K Street, N.W. Washington, DC 20005-1202			LONEY, DONALD J	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/698,433	AHN ET AL.	
	Examiner	Art Unit	
	Donald Loney	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-14, 16 and 19-22 is/are rejected.
- 7) ☒ Claim(s) 8, 9, 15, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 16 is rejected under 35 U.S.C. 102(e) as being anticipated by either Ko et al (2004/0056597) or Kang (2005/0023979) as presented in the last office action, mailed October 18, 2005.

Both of the above teach a plasma display as recited wherein dummy ribs are formed outside the display area. Refer to 36a-3d and 36f in the figures of Ko et al. Refer to 21 and 21' in the figures of Kang. The applicants' recitation that the dummy ribs be able to withstand sandblasting does not structurally distinguish the claims from the prior art, which teaches dummy ribs, since this is only a matter of degree. One could lightly sandblast which would not affect the dummy ribs.

3. Claim 16 is rejected under 35 U.S.C. 102(b) as being anticipated by any of Togawa (5844639), Kimura (5886467) or JP 2001-160360 as presented in the last office action, mailed October 18, 2005.

All of the above teach a plasma display as recited wherein dummy ribs are formed outside the display area. Refer to figures 4 and 6E showing dummy ribs 11 and

Art Unit: 1772

13 respectively in Togawa. Refer to claims 7-9 in Kimura. Refer to figure 2, element 11 in JP 2001-160360 along with paragraph [0009]-[0012] in the Detailed Description thereof, of which the examiner has supplied an English translation thereof. The applicants' recitation that the dummy ribs be able to withstand sandblasting does not structurally distinguish the claims from the prior art, which teaches dummy ribs, since this is only a matter of degree. One could lightly sandblast which would not affect the dummy ribs.

4. Claims 1, 5, 16, 21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka (64000080).

Tanaka teaches a plasma display as recited wherein dummy ribs are formed outside the display area. Refer to figures 1 and 4 showing dummy ribs 7, 8 and 9. This rejection was made to specifically address claims 1 and 5 since dummy rib 8, which appears shorter than ribs 7 and 9, can be considered the reinforcing rib which is different than the other dummy ribs as recited. The applicants' recitation that the dummy ribs be able to withstand sandblasting, in claims 16, 21 and 22 does not structurally distinguish the claims from the prior art, which teaches dummy ribs, since this is only a matter of degree. One could lightly sandblast which would not affect the dummy ribs.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 1772

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-7, 10-14, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over any of Ko et al, Kang, Togawa, Kimura, or JP 2001-160360 in view of Yoo (6090464) as presented in the last office action, mailed October 18, 2005.

The primary references teach the invention substantially as recited except for the reinforcing ribs being of a closed ring polygonal structure. See the 35 U.S.C. 102 rejection above.

Yoo teaches that a closed ring polygonal or circular structure 23 can be used to reinforce and space two substrates in a display device. Refer to figure 2 along with the Abstract and column 2, line 24 through column 3, line 53.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to the primary references to use a closed ring polygonal or circular structure to reinforce the spacing of the substrates, as taught by Yoo, motivated by the fact Yoo teaches this structure used for the same purpose as the primary references. With regards to claims 6, 7, 12, 13, 19 and 20 it would have been obvious to use the varying different structures, or particular numbers of sets of ribs, since this would only involve a change in shape or size of the ribs, which generally is considered within ordinary skill in the art. See MPEP 2144.04IV.

7. Claims 2-4, 6, 7, 10-14, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka in view of Yoo as presented in the last office action, mailed October 18, 2005.

Art Unit: 1772

The primary reference teaches the invention substantially as recited except for the reinforcing ribs being of a closed ring polygonal structure. See the 35 U.S.C. 102 rejection above.

Yoo teaches that a closed ring polygonal or circular structure 23 can be used to reinforce and space two substrates in a display device. Refer to figure 2 along with the Abstract and column 2, line 24 through column 3, line 53.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to the primary reference to use a closed ring polygonal or circular structure to reinforce the spacing of the substrates, as taught by Yoo, motivated by the fact Yoo teaches this structure used for the same purpose as the primary references. With regards to claims 6, 7, 12, 13, 19 and 20 it would have been obvious to use the varying different structures, or particular numbers of sets of ribs, since this would only involve a change in shape or size of the ribs, which generally is considered within ordinary skill in the art. See MPEP 2144.04IV.

Response to Arguments

8. Applicant's arguments filed January 18, 2006 have been fully considered but they are not persuasive. The applicant argues that Ko, Kang, Togawa, Kimura and JP 2001-160360 do not specifically teach the dummy ribs can withstand sandblasting. This is not persuasive since, as previously indicated by the examiner, one could only lightly sandblast without affecting the ribs. The prior arts structure is the same as the applicant's and no materials and/or strength of sandblasting is recited which may distinguish over the prior art. The applicant argues that Tanaka et al teaches that

Art Unit: 1772

dummy ribs 7, 8 and 9 are the same height and width as barrier ribs 5. However, from figure 4, dummy ribs 8 are shorter than dummy ribs 7 or 9 which reads upon the recited language of "being different in design" in line 7 of claim 1. Also, from figure 1, dummy rib 8 is short and straight while dummy rib 7 (at the corners) is L-shaped, which are different in design. The applicant argues that the closed structure of Yoo could not be used as a dummy rib since it is too large and would extend over the entire substrate, through both the image and non-image areas. This is not persuasive since the examiner is not relying on Yoo for its size, just its closed structure applied to the primary references.

Allowable Subject Matter

9. Claims 8, 9, 15, 17 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to teach the zig-zag structure of the ribs per claims 9 and 17 and the interconnected dummy ribs of claims 8, 15 and 18.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1772

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Loney whose telephone number is (571) 272-1493. The examiner can normally be reached on Mon, Tues, Thurs and Fri. 8AM-4PM, flex schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/698,433

Page 8

Art Unit: 1772

A handwritten signature in black ink, appearing to read "Donald Loney", with a stylized flourish at the end.

Donald Loney
Primary Examiner
Art Unit 1772

DJL:D.loney
03/31/06